

**The Role of Education and Public Outreach (E/PO)
in the Pluto-Kuiper (PKB) Mission
June 18, 2001**

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What Are We Trying To Do?

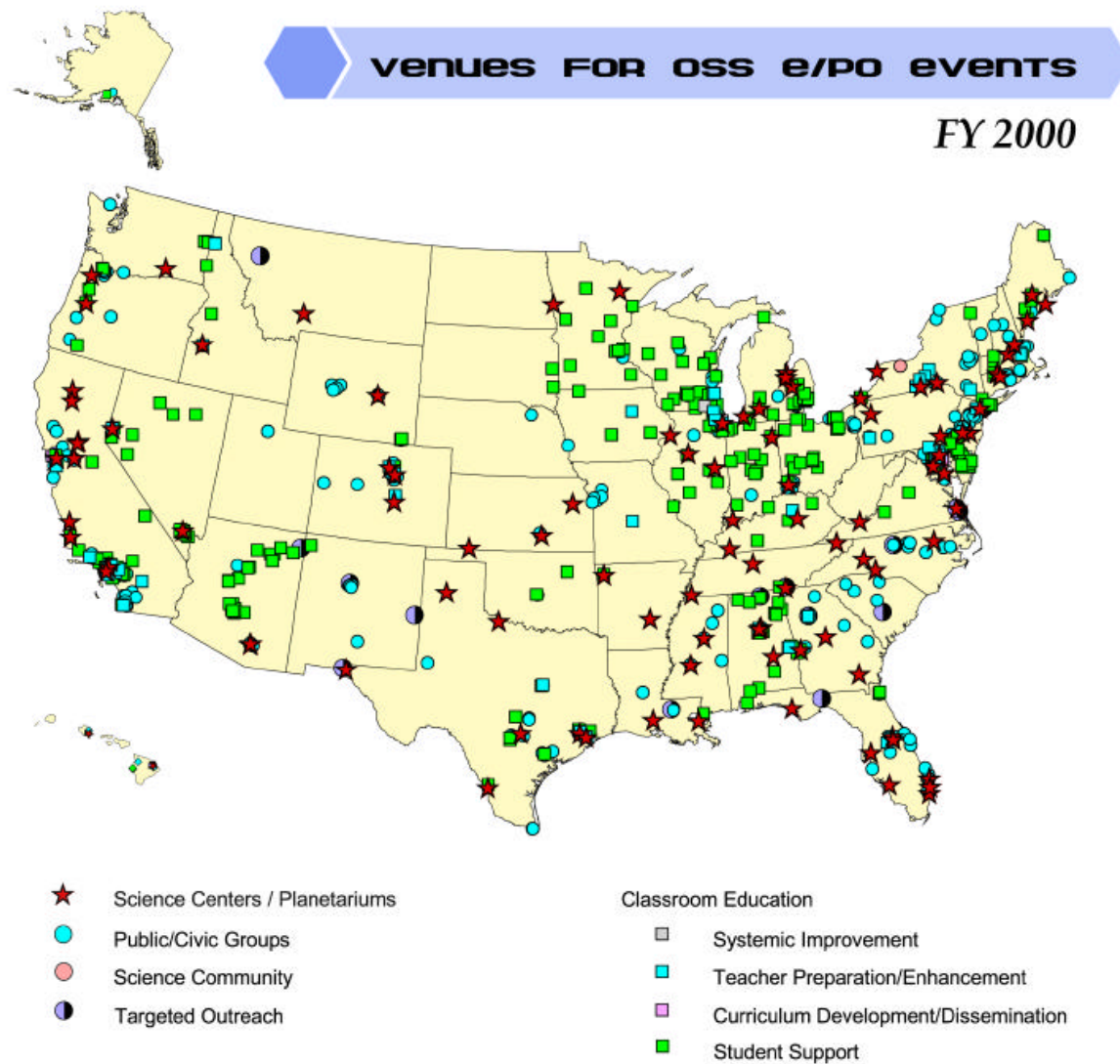
- Share the excitement of space science discoveries with the public
- Enhance the quality of science, mathematics and technology education, particularly at the pre-college level
- Help create our 21st century scientific and technical workforce

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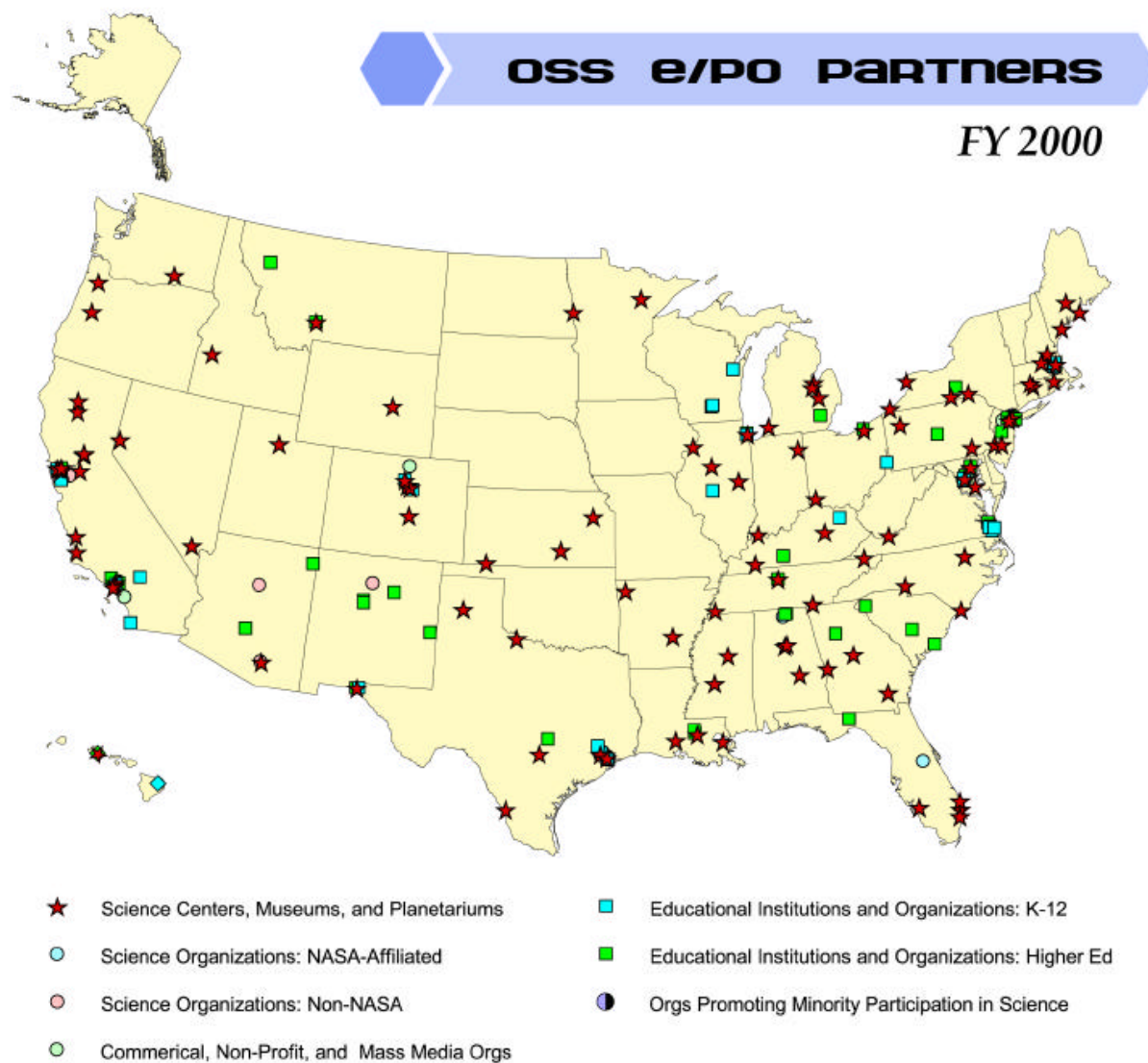
Where Are We Now?

- OSS is firmly committed to making a substantive contribution to pre-college education and the broad public understanding of science, mathematics, and technology
- A major national program of space science education is now underway. For further information see:
 - The OSS FY 2000 E/PO Annual Report (January 2001)
 - The OSS E/PO Newsletters (January and May 2001)
 - The OSS E/PO Homepage

- Includes over 1500 discrete events at venues encompassing all 50 states, the District of Columbia, Guam, Australia, Canada, Mexico, and Peru.



- Involves over 200 partner institutions and organizations.



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What Are We Looking For?

- A credible story containing specifics and commitments/reality not rhetoric
 - See the Appendix of the Concept Study Guideline
 - A good case can be laid out in 4 pages
 - Letters of support/commitment from E/PO partners are required
- A program that is aligned to the OSS E/PO Strategy and E/PO Implementation Plan
 - The content of both these documents is directly reflected in the E/PO Criteria that will be used to evaluate concept studies
- A commitment to adequately fund the E/PO program
 - OSS Guideline: 1-2% of the investigation cost through all phases

Evaluation will be done as part of the TMC0 process

E/PO may play a role in the selection

OSS Education and Public Outreach PKB E/PO Concept Study Requirements

- Concept Study must include a well developed, mature version of the proposed E/PO program
 - E/PO program to be developed in more depth in the same manner as the scientific/technical elements of the Concept Study are deepened
 - Adequate resources must be devoted to the planning and implementation of the E/PO program and activities
 - E/PO component will be professionally evaluated and the results will be considered as part of the overall selection process
- PI and key science team members must be actively involved in the E/PO effort
 - Key personnel actually responsible for oversight, coordination and implementation of the E/PO program must be identified
 - Statements of commitment required from E/PO partners in the Concept Study/Submission of ideas required
- Concept Study should address, where appropriate, coordination with other OSS E/PO programs

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General Evaluation Criteria

The general criteria to be applied to the evaluation of the E/PO component of the PKB Mission Concept Study are:

- The quality, scope and realism of the E/PO program including the adequacy, appropriateness, and realism of the budget
- The capability and commitment of the PI and the direct involvement of one or more science team members in overseeing and carrying out the E/PO program
- The establishment or continuation of effective partnerships with institutions and/or personnel in the fields of education and/or public outreach as the basis for an integral element of the E/PO program
- The adequacy of plans for evaluating the effectiveness and impact of the education and outreach programs and activities

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Specific Evaluation Criteria

To ensure that the goals and objectives of the OSS E/PO strategy are realized in practice, Concept Studies will also be evaluated using one or more of the following specific criteria as appropriate:

- For activities dealing directly with or strongly affecting the formal education system (e.g., through teacher workshops or student programs carried out at informal education institutions such as science museums and planetariums), the degree to which the E/PO effort is aligned with and linked to nationally recognized and endorsed reform efforts and/or reform efforts at the state or local levels
- The degree to which the E/PO effort contributes to the training of, involvement in, and broad understanding of science and technology by underserved and/or underutilized groups
- The potential for E/PO activities to expand their scope by having an impact beyond the direct beneficiaries, reaching large audiences, being suitable for replication or broad dissemination, or drawing on resources beyond those directly requested in the Concept Study

OSS Education and Public Outreach Expectations

Based on the funding guidelines...,the E/PO programs submitted...for this Concept Study involve the expenditure of substantial resources. It is generally expected that such E/PO programs will have a breadth and depth commensurate with those resources; will be multi-faceted in nature; address a number of different aspects of education and outreach contained in the specific criteria; and have state, regional, or national scope.

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Sources of Information

- A Short Reading List:
 - OSS Education and Public Outreach Strategy
 - OSS Education and Public Outreach Implementation Plan
 - OSS Explanatory Guide for the Education/Public Outreach Evaluation Criteria
 - OSS FY 2000 Education and Public Outreach Annual Report
 - OSS E/PO Newsletters
- The OSS “Explanatory Guide”
 - Contains answers to “Frequently Asked Questions”
 - Describes in more detail what the Evaluation Criteria mean Was developed to ensure that E/PO efforts are prepared and evaluated on a consistent basis
- Rosalyn Pertzborn

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Sources of Assistance

- Call your local Broker/Facilitator or the appropriate OSS Education Forum
 - The Support Network is there to help, but is not responsible for preparing the E/PO portion of your Investigation
- In accord with the operating principles developed by the Support Network, discussions with individual Teams developing Concept Studies will be treated as proprietary
- Contact information is available through the OSS E/PO Homepage

Support Network

Office of Space Science Education and Public Outreach



○ Forums

- **Astronomical Search for Origins and Planetary Systems**
 - Space Telescope Science Institute (STScI)
- **Structure and Evolution of the Universe (SEU)**
 - Smithsonian Astrophysical Observatory
- **Solar System Exploration (SSE)**
 - Jet Propulsion Laboratory
- **Sun-Earth Connection (SEC)**
 - Goddard Space Flight Center
 - University of California at Berkeley

☆ Broker/ Facilitators

- Depaul University (DU)
- Lunar and Planetary Institute (LPI)
- Ohio Aerospace Institute (OAI)
- SouthEast Regional ClearingHouse (SERCH)
- Space Science Institute (SSI)

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Some Summary Observations

- OSS is serious about education and public outreach
 - A major national program is now underway
- E/PO will be considered during the evaluation and selection process
 - E/PO has made a difference in some selections
- OSS has seen a significant evolution in the level of maturity, ambition and sophistication in mission E/PO programs over the past several years
 - We have high expectations for all missions
- Resources are available to help PI's in developing their Concept Studies
 - Contact the Forums and Broker/Facilitators for help
 - Read the “Explanatory Guide” and other available documentation
- Treat E/PO with the same rigor and professionalism that you treat the science and engineering aspects of your Concept Study